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APPLN. FILING DATE: JUNE 10, 1988
 TITLE: RECOMBINANT IMMUNOGLOBULIN PREPARATIONS
 INVENTOR(S): CABILLY ET AL.
 APPLICATION SERIAL NO: 07/205,419

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09/205-419
 1. a/19

6331415

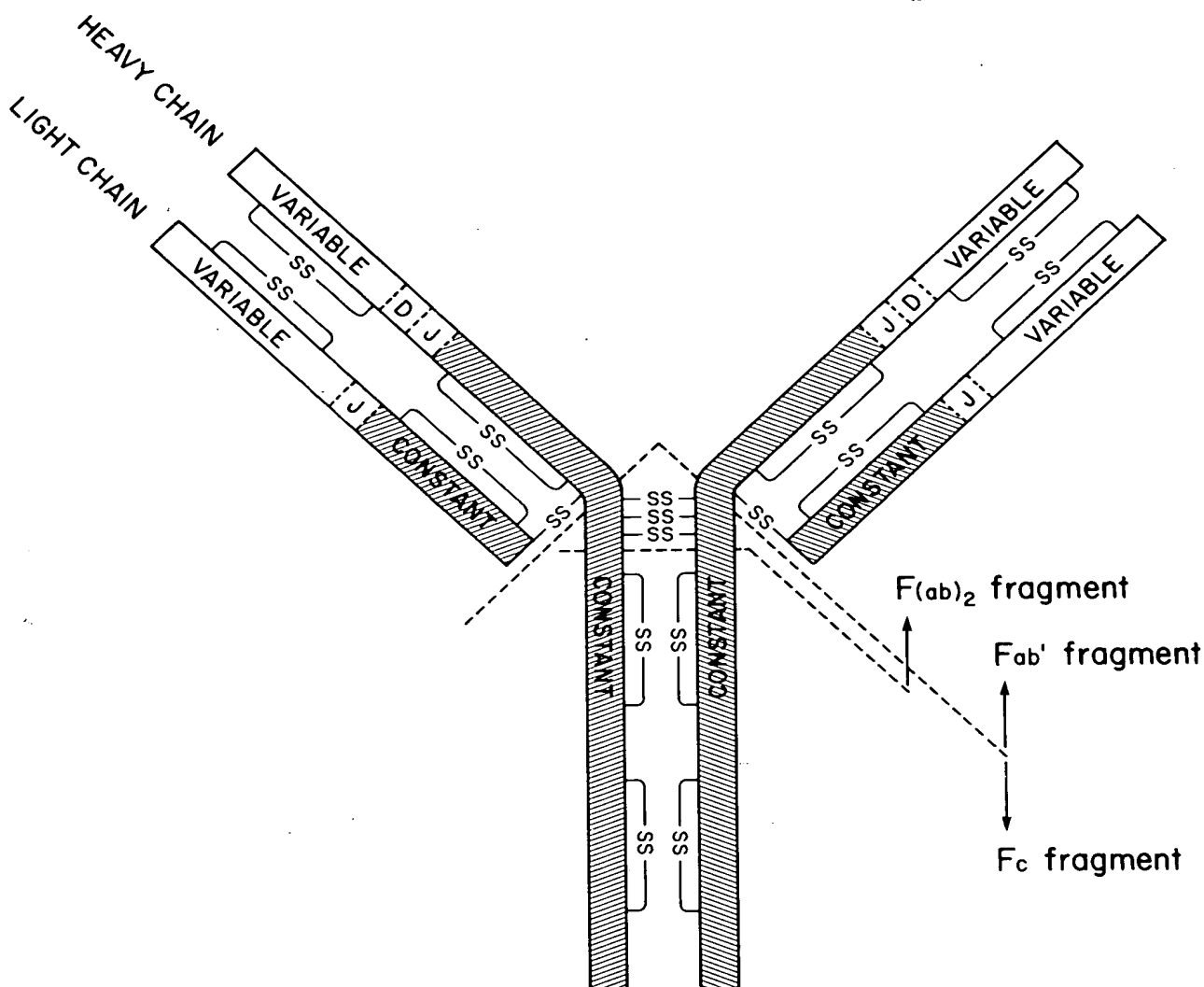


Fig. 1.

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1      GTTGTCTGGG TTGAAGGAGA CATTGIGATG ACCCAGTCTC ACAAATTCAT GTCCACATCA GTAGGAGACA GGGTCAGCAT CACCTGGCAAG      haeIII
      CAACGACACC AACATTCCTCT GTAACACTAC TGGGTCAGAG TGTTAAGTA CAGGTGTAGT CATCCTCTGT CCCAGTCTGT GTGGACGTTT      haeI
      tthIII      tthIII      hphI      hphI
      sfanI      sfanI

101     GGCAGTCAGG ATGTGGGTGC TGCTATAGCC TGGTATCAAC AGAAACCAGG ACAATCICCT AACTACTGA TTTACTGGGC ATCCACCCGG CACACTGGAG      hinfI
      CGGTCAGTCC TACACCCACG ACGATATCGG ACCATAGTTG TCTTTGGTCC TGTTAGAGGA TTGTATGACT AAATGACCG TAGGTGGGCC GTGTGACCTC      hpaII
      foki      foki      sfanI      sfanI

201     TCCCTGATCG CTTCACAGGC AGTGGATCTG GGACAGATTT CACTCTCACC ATTAGCAATG TGCAGTCTGA TGACTTGGCA GATTATTTCT GTCAACAATA      hincII
      AGGGACTAGC GAAGTGTCCG TCACCTAGAC CCTGTCTAAA GTGAGAGTGG TAATCGTTAC ACGTCAGACT ACTGAACCGT CTAATAAAGA CAGTTGTTAT      hpaI
      xhoI      xhoI      hphI      hphI
      sau3A      sau3A      hnu4HI      hnu4HI
      dpnI      dpnI      bbv      bbv

301     TACCGGGTAT CCTCTCACGT TCGGTGCTGG GACCAAGCTG GAGCTGAAC GGGCTGATGC TGCACCAACT GTATCCATCT TCCCACCATC CAGTGAGCAG      hincII
      ATGCCCCATA GGAGAGTGCA AGCCACGACC CTGGTTCGAC CTCGACTTG CCGACTAGC ACGTGGTTGA CATAGGTAGA AGGTGGTAG GTCACTCGTC      hpaI
      mnII      mnII      sau96      sau96
      avail      avail      aluI      aluI
      sfanI      sfanI      bbv      bbv

401     TTAACATCTG GAGGTGCCTC AGTCGTGTCG TTCTTGAACA ACTTCTACCC CAAAGACATC AATGTCAAGT GGAAGATTGA TGGCAGTGAA CGACAAATG      mboII
      AATTGTAGC CTCCACGGAG TCAGCACACG AAGAACTTGT TGAAGATGG GTTCTGTAG TTACAGTTCA CCTTCTAAT ACCGTCACT GCTGTTTAC      acyI
      mnII      mnII      ddel      ddel
      mboII      mboII
  
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Fig. 2A.

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          sau3A      fnu4HI      mnlI      hincII      aluI
          dpnI      bbv      mnlI      hincII      aluI
          bclI      mnlI      hincII      aluI
501  hgaI      CAGTTGGACT  GATCAGGACA  GCAAGACAG  CACCTACAGC  ATGAGCAGCA  CCCTCACGTT  GACCAAGGAC  GAGTATGAAC  GACATAACAG
      CGTCCCTGAA  CAGTTGGACT  GATCAGGACA  GCAAGACAG  CACCTACAGC  ATGAGCAGCA  CCCTCACGTT  GACCAAGGAC  GAGTATGAAC  GACATAACAG
      CGCAGGACTT  GTCAACCTGA  CTAGTCTGT  CGTTTCTGTC  GTGGATGTCG  TACTCGTCGT  GGGAGTGCAA  CTGGTTCTCTG  CTCATACTTG  CTGTATTGTC

          mnlI      haeIII      haeI      hphI      aluI      sau96      hgaI
          mnlI      haeIII      haeI      hphI      aluI      ddeI
601  CTATACCTGT  GAGGCCACTC  ACAAGACATC  AACITCACCC  ATTGTCAAGA  GCITCAACAG  GAATGAGTGT  TAGAGACAAA  GGTCCTGAGA  CGCCACCACC
      GATATGGACA  CTCCGGTGAG  TGTCTGTAG  TTGAAGTGG  TAACAGTTCT  CGAAGTTGTC  CTTACTCACA  ATCTGTGTT  CCAGGACTCT  GCGGTGGTGG

          aluI      aluI      mboI      ddeI      mnlI      hgiA      mnlI
          AGCTCCCGAG  CTCCATCCTA  TCTTCCTTC  TAAGTCTTG  GAGGTTCCC  CACAAGCGAC  CTACCACTGT  TGGGTGCTC  CAAACCTCCT  CCCCACCTCC
      TCGAGGGGTC  GAGGTAGGAT  AGAAGGGAAG  ATTCCAGAAC  CTCGAAAGG  GTGTCGCTG  GATGGTGACA  ACGCCACGAG  GTTGGAGGA  GGGGTGGAGG
          fokI

          mnlI      mnlI      xmnI      hinfI
          mnlI      mnlI      xmnI      hinfI
801  TTCTCTCCT  CCTCCCTTC  CTTGGCTTTT  ATCATGCTAA  TATTGCAGA  AAATATTCAA  TAAAGTGAGT  CTTTGCACCT  GA
      AAGAGGAGGA  GGAGGGAAG  GAACCGAAA  TAGTACGATT  ATAAACGTCT  TTTATAAGTT  ATTCACTCA  GAAACGTGAA  CT

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nucleotides: 882

Fig. 2B.

Fig. 3

TITLE: RECOMBINANT IMMUNOGLOBULIN PREPARATIONS

INVENTOR(S): CABILLY ET AL.

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APPROVED	O.G. FIG.
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1      hinfI      sau96      ddel      ahaIII      sfaNI
      GAGTCAGCAC TGAACACCGA CCCCTCACGA TGAACITCGG GCTCAGCTTG ATTACCTTG TCCTTGTTT AAAAGTTGTC CAGTGTGAAG TGATGCTGGT
      CTCAGTCGTG ACTTGTGCT ACTTGAAGCC CGAGTCGAAC TAAATGGAAC AGAACAAAA TTTTCAACAG GTCACACTTC ACTACGACCA

101    scrFI      sau96      fnu4HI      hinfI      hinfI
      hinfI      hinfI      ecorII      auaII      hinfI      hinfI
      GGAGTCGGG GGAGTCCTAA TGGAGCTGG AGGTCCTG AACTCTCTCT GTCAGCCTC TGCATTCACT TTCAGTAGAT ATGCCATGTC TTGGGTTGCG
      CCTCAGACCC CCTCAGAATT ACCTCGGACC TCCAGGGAC TTGAGAGGA CAGTCGGAG ACCTAAGTGA AAGTCATCTA TACGGTACAG ACCCAAGCC

201    hpaII      mnlI      hinfI      mboII      hinfI      hinfI
      CAGACTCCGG AGAAGAGGCT GGAGTGGGTC GCAACCATTA GTAGTGGTGG TAGTTCACAC CTTCATCCCA GACAGTGTGA AGGGCGATTC ACCATCTCCA
      GTCTGAGGCC TCTTCTCCGA CCTCACCAG CGTTGGTAAT CATCACCACC ATCAAGTGTG GAAGGTAGGT CTGTCACTT TCCCGCTAAG TGGTAGAGGT

301    rsal      mnlI      mnlI      ddel      haeIII      mnlI
      GAGACAATGC CAAGAACACC CTGTACCTGC AAATGAGCAG TCTGAGGTCT GAGGACACGG CCATGTATTA CTGTGCAAGA CCCCTCTTTA TTTCGTTAGT
      CTCTGTTACG GTTCTGTGG GACATGGACG TTTACTCGTC AGACTCCAGA CTCTGTGCC GGTACATAAT GACACGTTCT GGGGAGAAAT AAAGCAATCA

401    mnlI      ddel      hpaII      mnlI      ddel      haeIII      xhoII
      AGCGGACTAT GCTATGGACT ACTGGGGTCA AGGAACCTCA GTCACCGTCT CTTCAGCCAA AACGACACCC CCATCTGTCT ATCCACTGGC CCCTGGATCT
      TCGCCCTGATA CGATACTGA TGACCCGAGT TCCTGGAGT CAGTGGCAGA GGAGTCGGT TTGCTGTGG GGTAGACAGA TAGGTGACCG GGGACCTAGA

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Fig. 4A.

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501 fnu4HI ncoI scrFI fnoI foki hphI ecorII scrFI xhoII
 bbsI hphI ecorII bbsEII ecorII ecorII sau3A
 GCTGCCCAAA CTAACCTCCAT GGTGACCCCTG GGTGACCCCTG TCAAGGGCTA TTCCCTGAG CCAGTGACAG TGACCTGGAA CTCTGGATCC CTGTCCAGCG
 CGACGGGTTT GATTGAGTA CCACCTGGGAC CCTACGGACC AGTCCCGAT AAAGGGACTC GGTCACTGTC ACTGGACCTT GAGACCTAGG GACAGGTGCG

601 hgiA pvuII pstI mnII ddel fnu4HI bbsI ddel mnII haeIII hphI
 GTGTGCACAC CTTCCAGCT GTCCCTGCAGT CTGACCTCTA CACTCTGAGC AGCTCAGTGA CTGTCCCTC CAGCCCTCGG CCCAGCGAGA CCGTCACCTG
 CACACGTGTG GAAGGGTGA CAGGACGTCA GACTGGAGAT GTGAGACTCG TGAGACTCACT TCGAGTCACT GACAGGGGAG GGTGCGCTCT GGCAGTGGAC

701 bglI haeIII fnu4HI scrFI ecorII ncoI rsal
 CAACGTTGCC CACCCGGCCA GCAGGACCAA GGTGACAAAG AATATTGTG CCAGGGATTG TGGTTGTAAG CCTTGCATAT GTACAGTCCC AGAAGTATCA
 GTTGCAACGG GTGGGCGGT CGTCGTGGT CCACCTGTTT TTTAACACG GTCCCTAAC ACCAACATTC GGAACGTATA CATGTCAGG TCTTCATAGT

801 mboII mboII foki hgiA hinfI mstII sau3A
 TCTGTCTCA TCTTCCCCC AAAGCCCAAG GATGTGCTCA CCATTACTCT GACTCCTAAG GTACAGTGTG accI foki
 AGACAGAAGT AGAAGGGGG TTTCGGGTTT CTACACGAGT GGTAAATGAGA CTGAGGATTC CTGAGGATTC AACACCATCT GTAGTCGTTT CTACTAGGGC

901 sau96 pvuII mnII hgiA aluI hgal hpaII ddel
 AGGTCCAGTT CAGCTGGTTT GTAGATGATG TGGAGGTGCA CACAGCTCAG ACCCAACCCC GGGAGGAGCA GTTCAACAGC ACTTCCGCT CAGTCAGTGA
 TCCAGGTCAA GTGACCAA CATCTACTAC ACCTCCACGT GTGTGAGTC TGGTTGGG CCTCCTCGT CAAGTTGTCG TGAAGGGCA GTCAGTCACT

Fig. 4B.

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BY	CLASS SUBCLASS
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11001	ACTTCCCATC ATGCACCAGG ACTGGCTCAA TGGCAAGGAG TTCAATGCA GGGTCAACAG TGCAGCTTTC CCTGCCCCCA TCAGAGAAAC CATCTCCAAA TGAAGGGTAG TACGTGGTCC TGACCGAGTT ACCGTTCTCT AAGTTTACGT CCCAGTTGTC ACGTGGAAAG GGACGGGGGT AGCTCTTTTG GTAGAGGTTT	scrFI ecorII	fnu4HI bbv	hincII alul	taqI
11101	ACCAAAGGCA GACCGAAGGC TCCACAGGTG TACACCATTG CACCTCCCAA GGAGCAGATG GCCAAGGATA AAGTCAGTCT GACCTGCATG ATAACAGACT TGGTTCCGT CTGGCTCCG AGGTGTCAC ATGTGGTAAG GTGGAGGGTT CCTCGTCTAC CGGTTCTAT TTCAGTCAGA CTGGACGTAC TATTGTCGA	rsal mnII	haeIII haeI balI	haeIII	
11201	mbolI mbolI TCCTCCCTGA AGACATTACT GTGGAGTGGC AGTGGAAATGG GCAGCCAGCG GAGAACTACA AGAACACTCA GCCCATCATG AACACGAATG GCTCTTACTT AGAAGGGACT TCTGTAATGA CACCTCACCG TCACCTTACC CGTCGGTCGC CTCCTGATGT TCTTGTGAGT CGGGTAGTAC TTGTGCTTAC CGAGAATGAA	fnu4HI bbv	ddel		
11301	accI alul CGTCTACAGC AAGCTCAATG TGCAGAAGAG CAACTGGGAG GCAGGAAATA CTTCACCTG CTCTGTGTTA CATGAGGGCC TGCACAAACCA CCATACGTAG GCAGATGTCG TTCGAGTTAC ACGTCTTCTC GTTGACCTC CGTCTTTAT GAAAGTGGAC GAGACACAAT GTACTCCCGG ACGTGTGGT GGTATGACTC	mbolI mnII	hphI	mnII haeIII	mbolI ddel
11401	mnII AAGAGCCTCT CCACTCTCC TGGTAAATGA TCCCAGTGTG CTGGAGCCCC TCTGTCTCTA CAGGACTCTG ACACCTACTT CCACCCCTCC CTGTATAAAT TTCTCGGAGA GGGTGAGAGG ACCATTTACT AGGGTCACAG GAACTCGGG AGACCAAGGAT GTCTGAGAC TGTGGATGGA GGTGGGGAGG GACATATTTA	scrFI ecorII	sau3A dpnI	mnII mnII	mnII
11501	AAGCACCCCA GCACTGCCTT GGGAAAAA TTTCGTGGGT CGTGACGGAA CCCTTTTT				

Fig. 4C.

APPROVED	O.G. FIG.	
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TITRE RECOMBINANT IMMUNOGLOBULIN PREPARATIONS

INVENTOR(S): CABILLY *ET AL.*

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[illegible]

Fig. 5A.

APPROVED	O. G. FIG.
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 TITLE: RECOMBINANT IMMUNOGLOBULIN
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250      ile phe pro pro lys pro lys: asp val leu thr thr ile thr leu thr pro lys val thr cys val val val asp ile ser lys asp asp pro
      AUC UUC CCC CCA AAG CCC AAG GAU GUG CUC ACC AUU ACU CUG ACU GUC AAG CCU CCU AAG GUC AUA GUG GUA GUA GUA GAC AUC AGC AAG GAU GAU CCC
      270
260      glu val gln phe ser trp phe val asp asp val glu val his thr ala gln thr thr gln pro arg glu glu gln phe asn ser thr phe arg
      GAG GUC CAG UUC AGC UGG UUU GUA GAU GAU GUG GAG GAG GUG CAC ACA GCU CAG ACG CAA CCC CGG GAG GAG CAG UUC AAC AGC ACU UUC CGC
      300
270      ser val ser glu leu pro ile met his gln asp trp leu asn gly lys glu phe lys cys arg val asn ser ala ala phe pro ala pro
      UCA GUC AGU GAA CUU CCC AUC AUG CAC CAG CAG CAG GAC GAC UGG CUC AAU GGC AAG GAG UUC AAA UGC AGG GUC AAC AGU GCA GCU UUC CCU GCC CCC
      330
280      ile glu lys thr ile ser lys thr lys gly arg pro lys ala pro gln val thr thr ile pro pro pro lys glu gln met ala lys asp
      AUC GAG AAA ACC AUC UCC AAA ACC AAA GGC AGA CCG AAG GCU CCA CAG GUG UAC ACC AUU CCA CCU CCC AAG GAG CAG AUG GCC AAG GAU
      360
290      lys val ser leu thr cys met ile thr thr asp phe phe pro glu asp ile thr thr val thr glu thr trp gln trp asn gly gln pro ala glu asn tyr
      AAA GUC AGU CUG ACC UGC AUG AUA ACA GAC GAC UUC UUC UUC GAA GAC AAU ACU GUG GAG UGG CAG UGG AAU GGG CAG CCA GCG GAG AAC UAC
      390
300      lys asn thr gln pro ile met asn thr asp gly ser tyr phe val tyr ser lys leu asn val gln lys ser asn trp glu ala gly asn
      AAG AAC ACU CAG CCC AUC AUG AAC ACG AAU GGC UCU UAC UUC GUC UAC AGC AAG CUC AAU GUG CAG AAG AGC AAC UGG GAG GCA GGA AAU
      420
310      thr phe thr cys ser val leu his glu gly leu his asn his thr glu lys ser leu ser his ser pro gly lys OP
      ACU UUC ACC UGC UCU GUG UUA CAU GAG GGC CUG CAC AAC CAC CAU ACU GAG AAG AGC CUC UCC CAC CCU GGU AAA UGA UCCCAGUGUCCU
      447
      UGGAGCCUUGGUCCUACAGGACUCUGACACCUACCCUCCUCCUUAUAAUAAAGCACCACCCAGCACUGCCUUGGGAAAAA
  
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Fig. 5B.

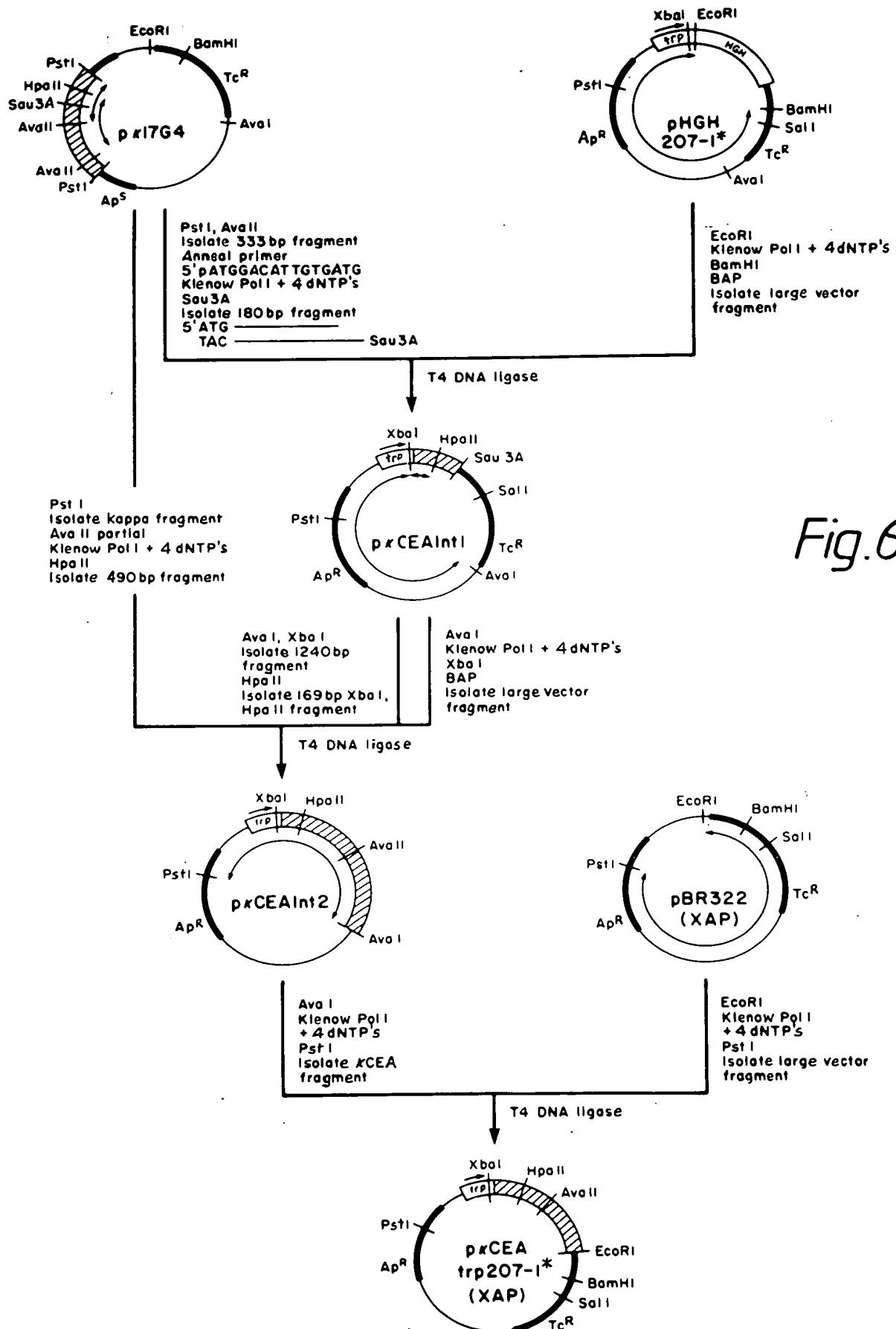


Fig.6.

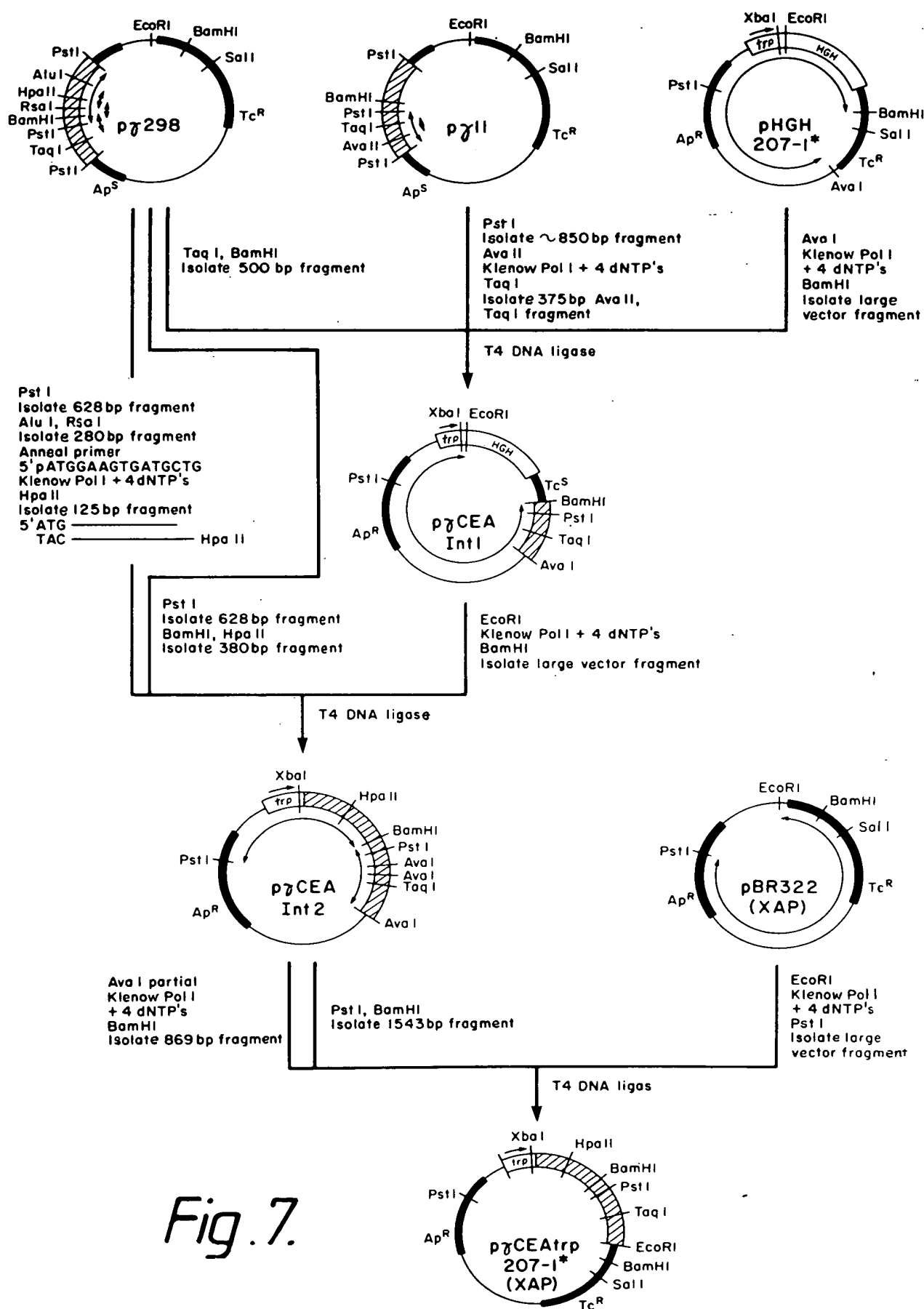


Fig. 7.

APPROVED	O. G. FIG.	
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TITLE: RECOMBINANT IMMUNOGLOBULIN PREPARATIONS

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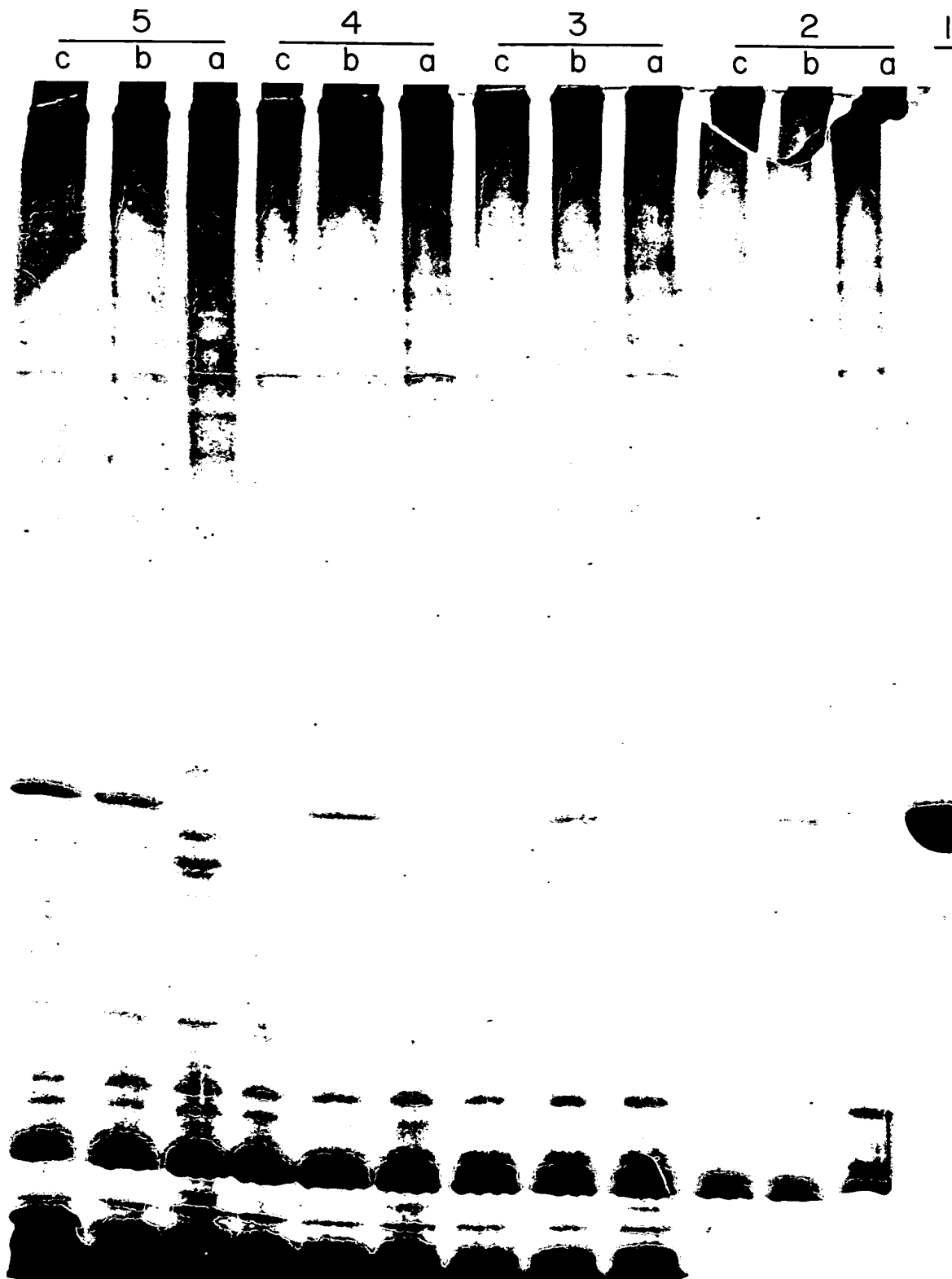


Fig. 8A.

APPROVED	O. G. FIG.	
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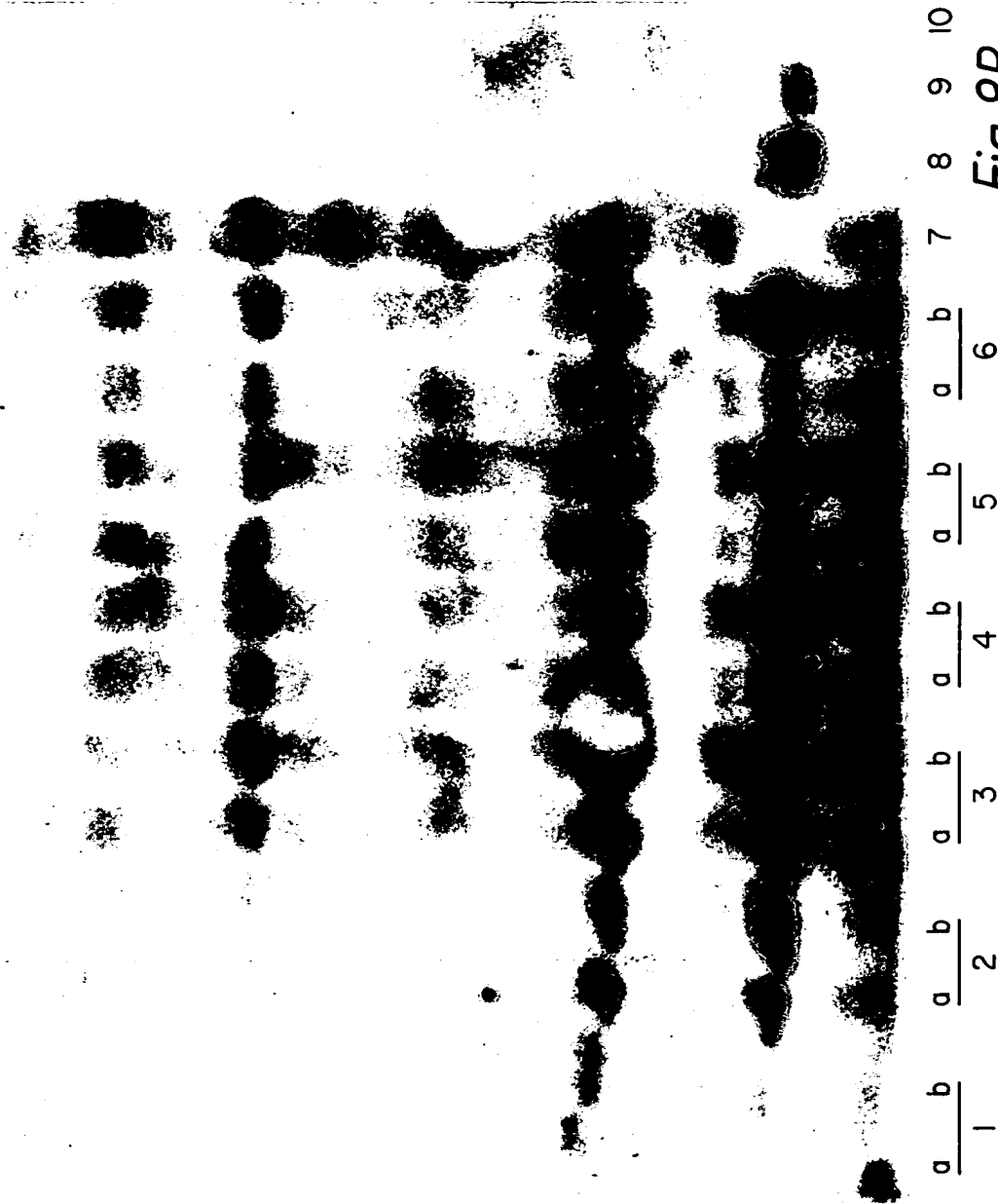


Fig. 8B.

APPROVED	O.G. FIG.	
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1 2 3 4 5 6 7 8 9

Fig. 8C.

APPROVED	O. B. FIG.
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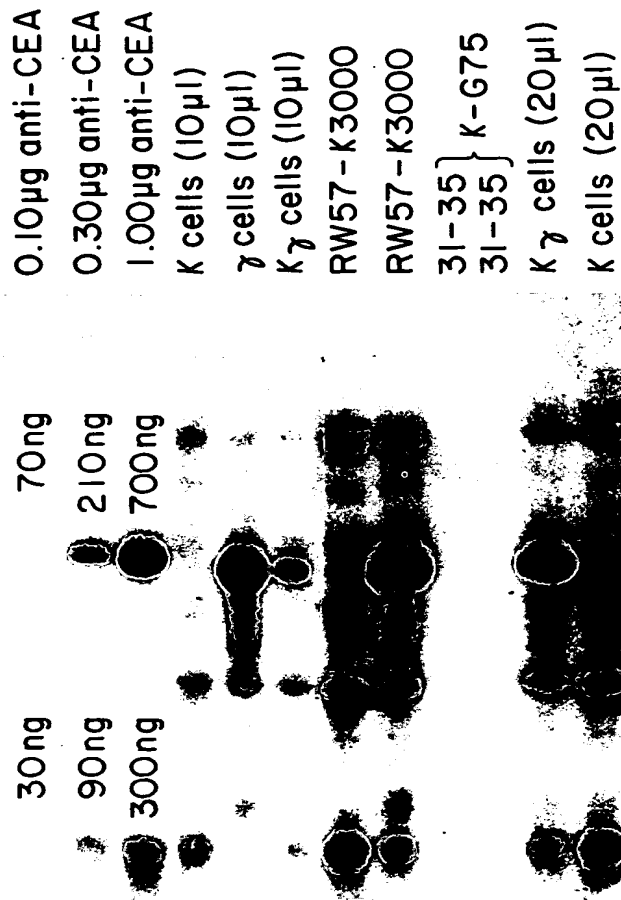


Fig. 9.

APPROVED	O.G. FIG.
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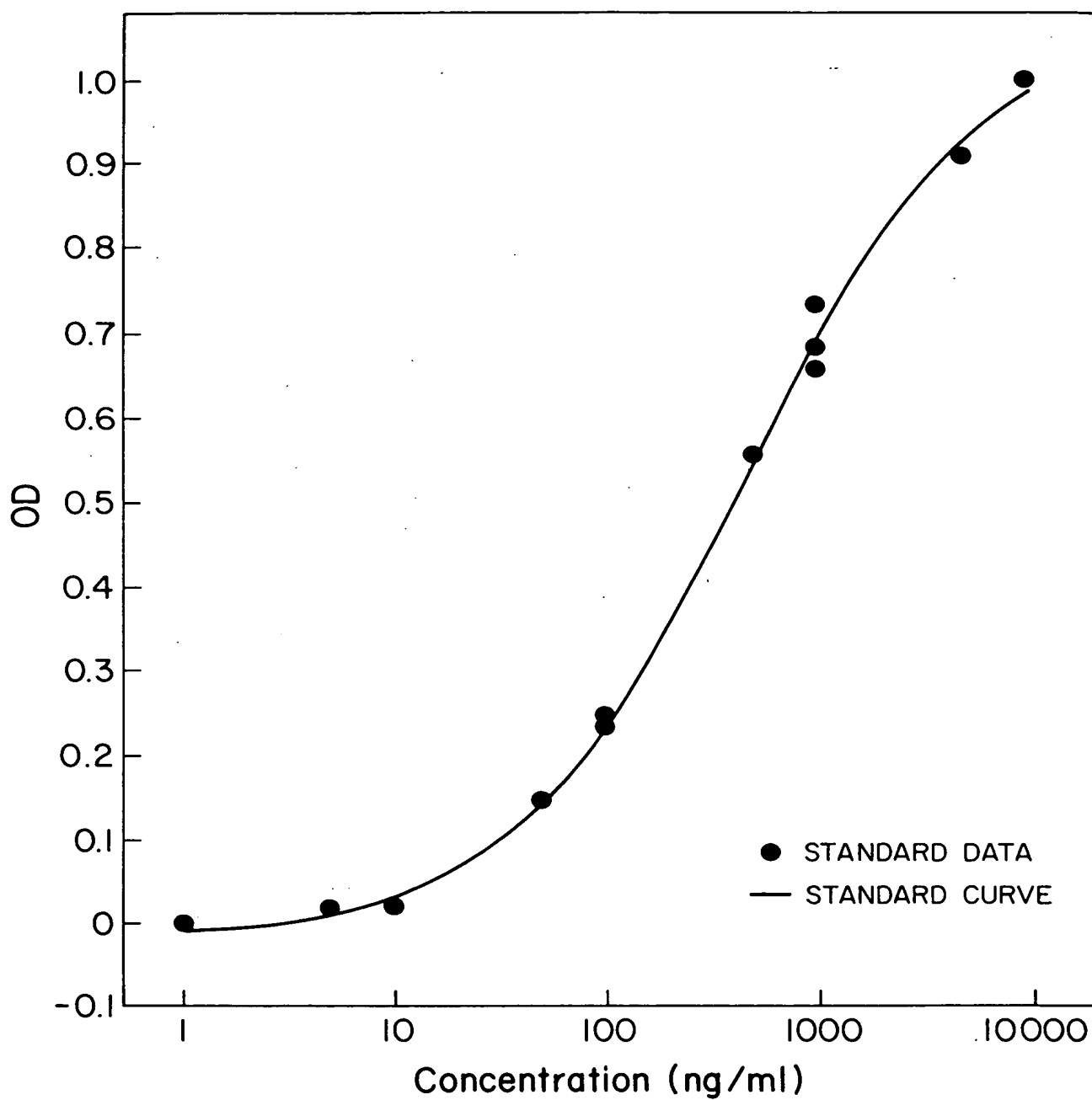


Fig. 10.

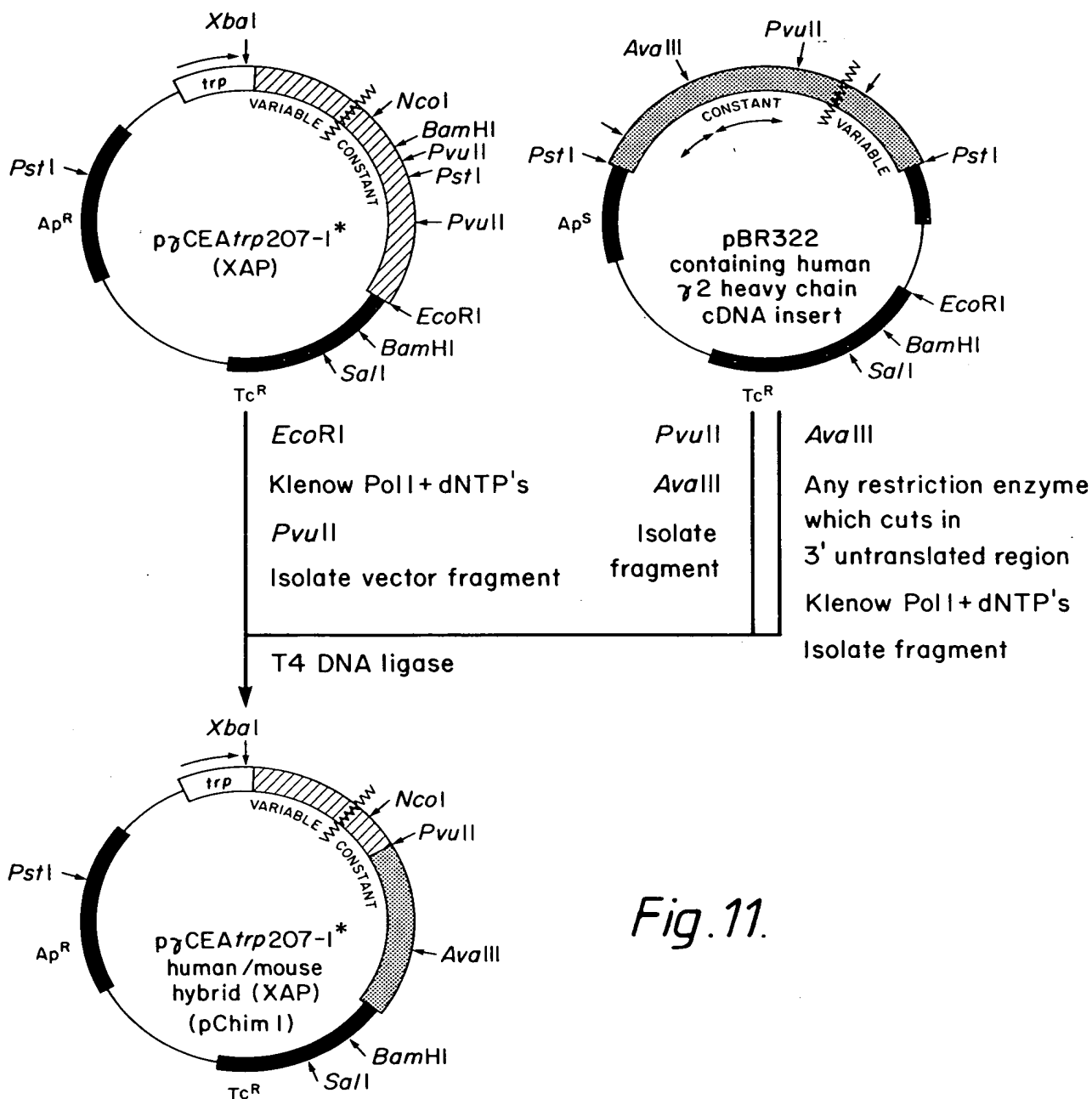


Fig. 11.

APPROVED	Q.G. FIG.
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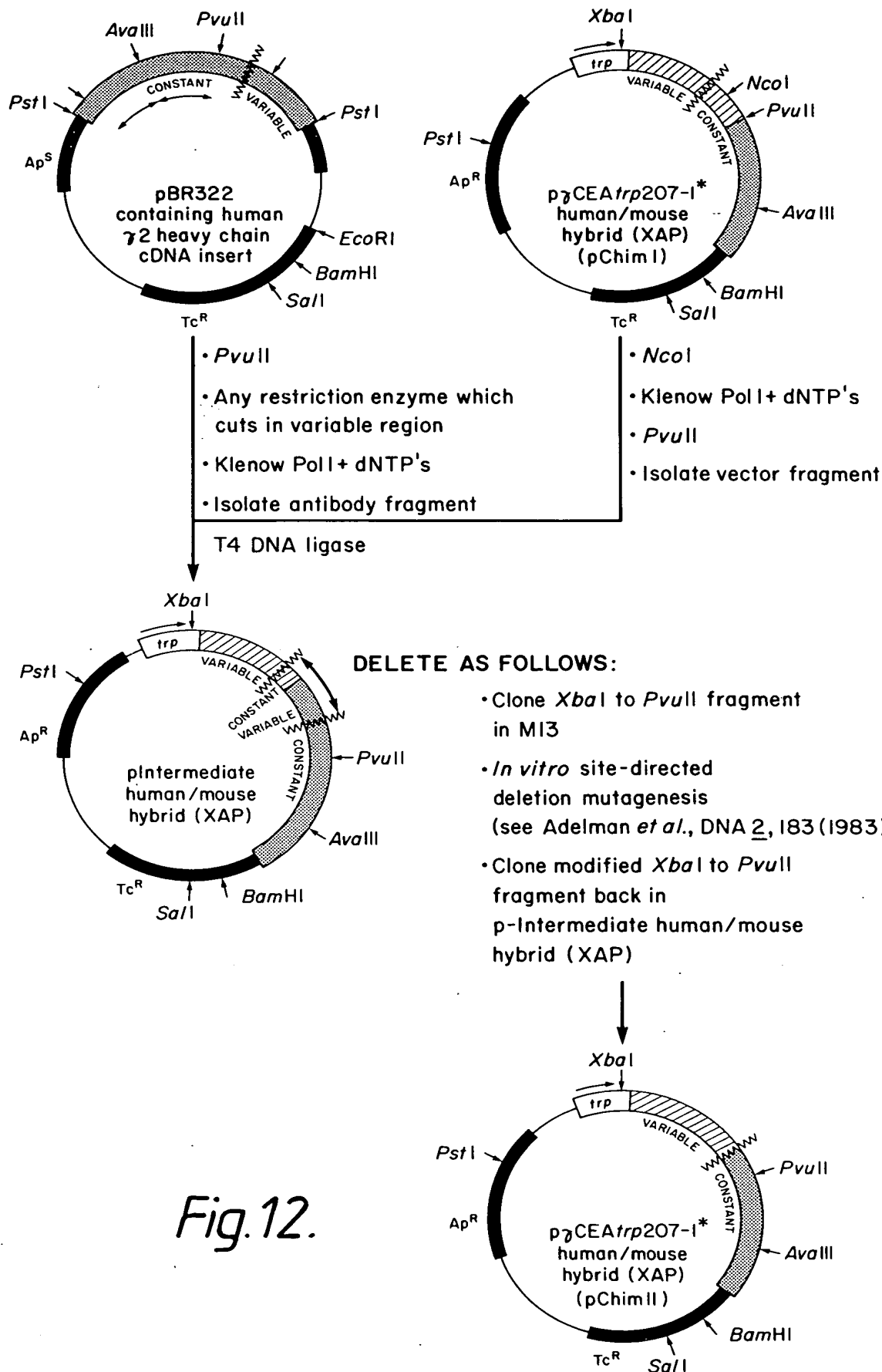


Fig.12.

APPROVED	FIG.
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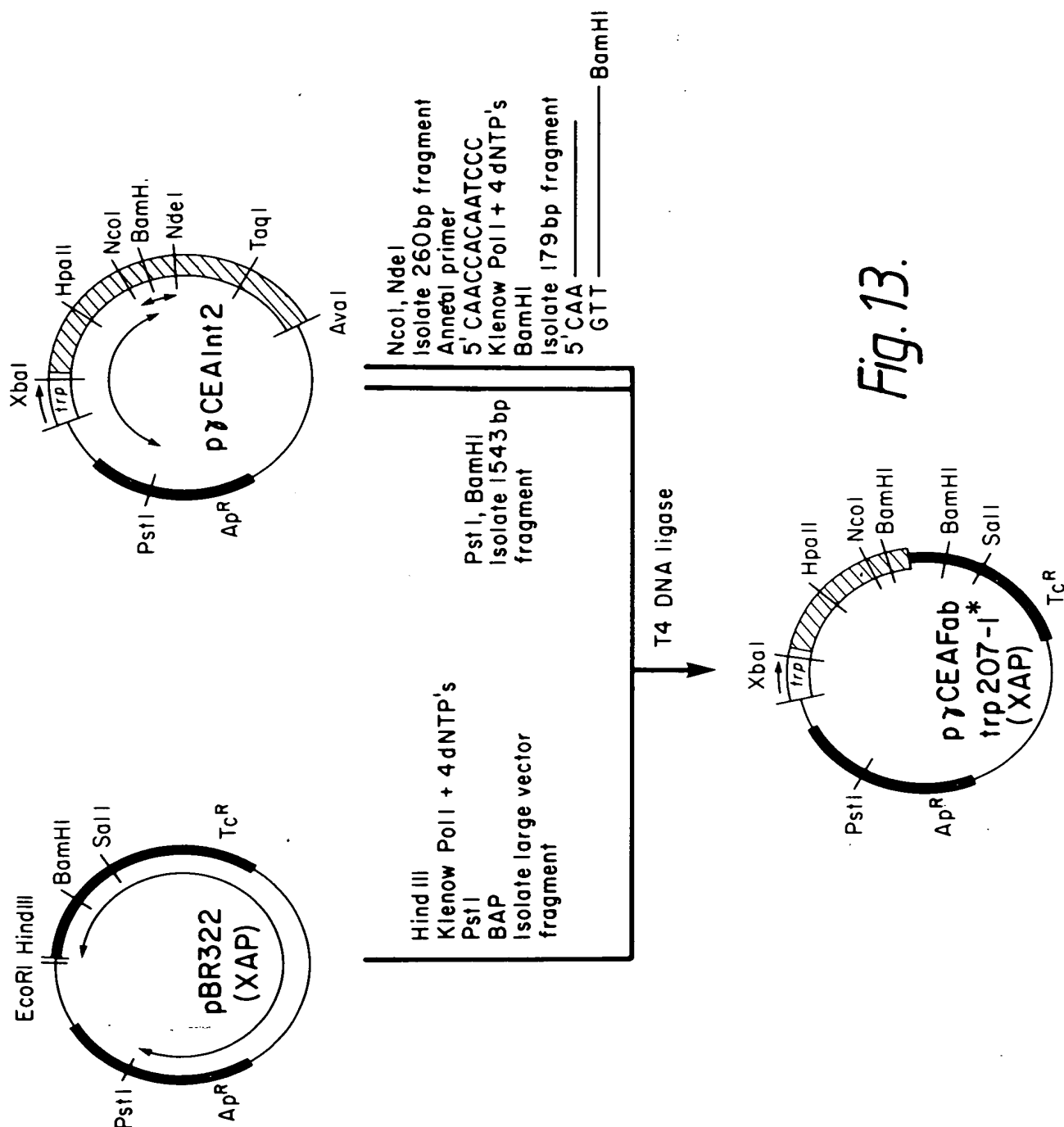


Fig. 13.